Claims

1. A method for the manufacture of solutions of biodegradable plastics, in particular of aliphatic polyester amides, wherein the aliphatic polyester amide is added to a solvent mixture containing

A) a C1-C4 alcohol;

B) a C1-C6 ketone; and/or

C) an aromatic carboxylic acid or a salt thereof.

2. The method as defined in Claim 1, wherein methanol and/or ethanol are used as the C1-C4 alcohol.

3. The method as defined in one of Claims 1 ~~or 2~~, wherein acetone and/or methyl ethyl ketone are used as the ketone.

4. The method as defined in one of Claims 1 ~~through 3~~, wherein the aromatic carboxylic acid is benzoic acid.

5. The method as defined in one of Claims 1 ~~through 4~~, wherein the polyester amide is a copolymer based on aliphatic monomers and has a melting point of at least 75¡C, and the weight proportion of the ester structure is between 30 and 70%, and the proportion of the amide structure is between 70 and 30%.

6. The method as defined in one of Claims 1 ~~through 5~~, wherein the solvent mixture contains water in a quantity up to 30 wt%.

7. The method as defined in one of Claims 1 ~~through 6~~, characterized by the

following steps:

a) the plastic is placed in a vessel;

b) the solvent mixture is added to the vessel until the plastic is covered by the solvent mixture;

c) the vessel is sealed and the plastic and solvent mixture are allowed to stand until the plastic has swollen and softened;

d) the softened and swollen plastic is mechanically comminuted and the resulting emulsion is preferably filtered.

8. The method as defined in Claim 7, wherein the swelling operation takes place under vacuum.

9. The method as defined in Claim 7 ~~or 8,~~ wherein solvent is added again at least once while the plastic is swelling.

10. The method as defined in one of Claims 7 ~~through 9,~~ wherein the swelling time is 2 to 60 hours.

11. The method as defined in one of Claims 7 ~~through 10,~~ wherein further solvent is added during comminution of the swollen plastic.

12. The method as defined in one of Claims 7 ~~through 11,~~ wherein the solids filtered out during filtration are added to a new batch of plastic + solvent mixture.

13. Use of the solvent obtained as defined by one of Claims 1 ~~through 12~~ for the manufacture of films.

14. The use as defined in Claim 13, wherein the films contain fillers.

15. The use as defined in Claim 14, wherein compost, peat, garden mold, and/or CaSO4 are used as fillers.

16. Use of the solution obtained as defined in one of Claims 1 ~~through 12~~ for coating substrates made of metal, glass, paper, wood, plastic, ceramic, and foodstuffs.

17. Use of the solution obtained as defined in one of Claims 1 ~~through 12~~ as an adhesive.

[Modified sheets, IPEA/EP]

Claims

1. A method for the manufacture of solutions of biodegradable aliphatic polyester amides, wherein the aliphatic polyester amide is added to a solvent mixture containing

A) a C1-C4 alcohol;

B) a C1-C6 ketone; and/or

C) an aromatic carboxylic acid or a salt thereof.

2. The method as defined in Claim 1, wherein methanol and/or ethanol are used as the C1-C4 alcohol.

3. The method as defined in one of Claims 1 ~~or 2,~~ wherein acetone and/or methyl ethyl ketone are used as the ketone.

4. The method as defined in claim 1 ~~one of Claims 1 through 3;~~ wherein the aromatic carboxylic acid is benzoic acid.

5. The method as defined in claim 1 ~~one of Claims 1 through 4~~, wherein the polyester amide is a copolymer based on aliphatic monomers and has a melting point of at least 75¡C, and the weight proportion of the ester structure is between 30 and 70%, and the proportion of the amide structure is between 70 and 30%.

6. The method as defined in claim 1 ~~one of Claims 1 through 5~~, wherein the solvent mixture contains water in a quantity up to 30 wt%.

7. The method as defined in ~~one of Claims 1 through 6~~ claim 1, characterized by the following steps:

a) the polyester amide is placed in a vessel;

b) the solvent mixture is added to the vessel until the polyester amide is covered by the solvent mixture;

c) the vessel is sealed and the polyester amide and solvent mixture are allowed to stand until the polyester amide has swollen and softened;

d) the softened and swollen polyester amide is mechanically comminuted and the resulting emulsion is preferably filtered.

8. The method as defined in Claim 7, wherein the swelling operation takes place under vacuum.

9. The method as defined in Claim 7 ~~or 8~~, wherein solvent is added again at least once while the polyester amide is swelling.

10. The method as defined in ~~one of~~ Claim 7 ~~through 9~~, wherein the swelling time is 2 to 60 hours.

11. The method as defined in ~~one of Claims 7 through 10~~ claim 7, wherein further solvent is added during comminution of the swollen polyester amide.

12. The method as defined in ~~one of Claims 7 through 11~~ claim 7, wherein the solids filtered out during filtration are added to a new batch of polyester amide + solvent mixture.

13. Use of the solvent obtained as defined by ~~one of Claims 1 through 12~~ claim 1 for

the manufacture of films.

14. The use as defined in Claim 13, wherein the films contain fillers.

15. The use as defined in Claim 14, wherein compost, peat, garden mold, and/or CaSO4 are used as fillers.

16. Use of the solution obtained as defined in ~~one of Claims 1 through 12~~ claim 1 for coating substrates made of metal, glass, paper, wood, plastic, ceramic, and foodstuffs.

17. Use of the solution obtained as defined in ~~one of Claims 1 through 12~~ claim 1 as an adhesive.